REMARKS/ARGUMENTS

Claims 4 and 6 are currently pending. Claims 1-3 have been canceled. Claims 4 and 6 are currently amended.

Priority

Claims 1-3 have been canceled. The priority date of the instant claims as amended should be maintained as February 26, 1988, as the production of enzymes in plants transfected with a recombinant plant viral expression construct is supported therein.

Claim Rejections: 35 USC 112, Second Paragraph

Claim 4 was rejected under 35 U.S.C. 112, second paragraph. This rejection is respectfully traversed. The complementary nucleotide sequence claimed is one that will make "an alpha-galactosidase enzyme which is enzymatically active" irrespective of length, and is intended to cover the situation in which the viral expression vector comprises a negative strand virus. Reconsideration and withdrawal of the rejection is respectfully requested.

Claim Rejections: 35 USC 112, First Paragraph

Enablement

Claims 1-4 and 6 were rejected under 35 U.S.C. 112, first paragraph for lack of enablement. This rejection is respectfully traversed. The claims are drawn to a method of making enzymatically active alpha-galactosidase. Teaching of an assay to determine enzyme activity is found, for example, in Example 8, paragraph [0222] of the specification. Teaching of an assay for an enzymatically active fragment of alpha-galactosidase is found, for example, in Examples 10 and Example 12 of the specification. Analysis of the alpha-galactosidase is taught in Example 13. Accordingly, the claims as amended are enabled by the specification, and withdrawal of the rejection is respectfully requested.

Written Description

Claims 1-4 and 6 were rejected under 35 U.S.C. 112, first paragraph as failing to comply with the written description requirement. This rejection is respectfully traversed. The claims as amended are drawn to a method for producing enzymatically active alpha-galactosidase or variants thereof using transfections of a plant host. The specification supports the production of enzymes in a plant host via transfection with a viral vector. The specification also supports what is meant by an enzyme or an enzymatically active fragment thereof. Hence, one of skill in the art would recognize from the disclosure that the Applicants were in possession of the claimed invention. Accordingly, withdrawal of the rejection is respectfully requested.

Claim Rejections 35 USC 102

Claims 1-4 and 6 were rejected under 35 U.S.C. 102(b) as anticipated by Overbeeke et al. This rejection is respectfully traversed. Overbeeke et al. teaches:

> According to the invention, the alpha-galactosidases are prepared by recombinant DNA methods, whereby the gene coding for the protein having the desired alpha-galactosidase properties is cloned in a host organism and the transformed host organism or its progeny is forced to express the gene, thereby producing the polypeptide having the desired alpha-galactosidase properties, optionally after further treatment of the protein produced.

Overbeeke et al. envisions only expression from a transgenic host. In contrast, in the instant claims, no transgenic host is generated. Instead expression is via transfection with a recombinant plant viral expression construct. Overbeeke et al. do not teach or contemplate expression with a recombinant plant viral expression construct, hence do not anticipate the instantly claimed invention. Accordingly, withdrawal of the rejection is respectfully requested.

Claims 1-4 and 6 were rejected under 35 U.S.C. 102(b) as anticipated by Desnick et al. This rejection is respectfully traversed. The claims as amended in the instant application have a priority date of 2/26/1988, while Desnick et al. has a priority date of

10/24/1990, therefore, it is unavailable as prior art. Accordingly, withdrawal of the rejection is respectfully requested.

Claims 1-4 and 6 were rejected under 35 U.S.C. 102(e) as anticipated by Radin et al. This rejection is respectfully traversed. The claims as amended in the instant application have a priority date of 2/26/1988, while Radin et al. has a priority date of 9/14/1995, therefore, it is unavailable as prior art. Accordingly, withdrawal of the rejection is respectfully requested.

CONCLUSION

Claims 4 and 6 are now pending in this application. In view of the amendments and comments above, the rejections have been overcome. Reconsideration, withdrawal of the rejections and early indication of allowance are respectfully requested. If any issues remain, the examiner is encouraged to call the undersigned for prompt resolution.

Applicants petition for a three-month extension of time under the provisions of 37 CFR 1.136(a) for sufficient time to accept this response. The commissioner hereby is authorized to charge payment of any fees under 37 CFR § 1.17, which may become due in connection with the instant application or credit any overpayment to Deposit Account No.500933.

Respectfully submitted,

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/Wayne Fitzmaurice/
Wayne P. Fitzmaurice
Reg. No. 58,274

Wayne P. Fitzmaurice
Large Scale Biology Corporation
3333 Vaca Valley Parkway, Suite 1000
Vacaville, CA 95688
Tel.: (707) 446-5595
FAX.: (707) 446-3917
E-MAIL wayne.fitzmaurice@lsbc.com